



Gulf Way H

*Premium quality multifunctional oils for
lubrication of slideways, hydraulic systems and
gear boxes of machine tools.*

Product Description

Gulf Way H series are premium quality multifunctional oils developed for lubrication of slideways, hydraulic systems and gear boxes of machine tools. Their outstanding frictional properties and ability to readily separate from aqueous cutting fluids reduce "stick-slip" problems and lead to improved surface finish and dimensional accuracy of workpieces. They also possess excellent anti-wear and EP characteristics, adhesiveness filterability and also provide superior protection against oil degradation and corrosion of machine tool surfaces even in presence of aqueous cutting fluids. They exceed the performance requirements of Cincinnati Machine, DIN 51524 part 2, AFNOR NFE 48-603 (HM), DIN 51517 part 3 and US Steel 224.

Features & Benefits

- Low frictional properties reduce chatter and stick-slip of slides and ways and lead to improved surface finish and dimensional accuracy of workpieces
- Excellent protection against rust and corrosion even in the presence of aqueous cutting fluids
- Good filterability provides easy circulation through filters and reduces stick-slip, chatter and wear
- Excellent demulsibility provides ready separation from soluble cutting fluids and leads to prolonged coolant life and reduced cost of replacement and disposal
- Superior thermal and oxidative stability reduces deposit and sludge formation and provide long lubricant life
- Excellent anti-wear and EP properties provide high level of protection for slideways, gears, bearings and hydraulic system components
- Multifunctional performance characteristics reduces the potential of misapplication and assures excellent equipment performance

Applications

- Machine tool slides and ways, tables and feed mechanism of lathes, shapers, grinders and milling machines. Gulf Way H 32, 68 or 100 are recommended for horizontal slide lubrication and Gulf Way H 220 is recommended for vertical or inclined slides and ways
- Machine tool hydraulic systems particularly for machines having combined hydraulic and slideway lubrication system
- Machine tool gearboxes

Specifications, Approvals & Typical Properties

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Properties mentioned are typical only and minor variations, which do not affect product performance, are expected to arise in normal manufacturing processes. Please follow equipment manufacturer's recommendations for performance level and viscosity grade. The Safety Data Sheet for this product is available from your nearest Gulf Distributor. Please consult our local representative if any further information is required.

The information contained herein is believed to be correct at the time of publication and may be subject to modification from time to time. It is the user's responsibility to verify that this data sheet is current prior to using the product. No warranty expressed or implied is given concerning the accuracy of the information or the suitability of products. Gulf Oil International reserves the right to modify and change its products and specifications without prior notice.

This data sheet has been issued by us in English language only. In the event of any discrepancy between the English language version and any other language version, the English language version shall prevail.



| | | | | | |
|---|--------------------|--------------------|-------------|----------|-------------|
| ISO Viscosity grades | | 32 | 68 | 100 | 220 |
| Meets the following Specifications | | | | | |
| FIVES CINCINNATI (Former MAG IAS, LLC) | | P-53 | P-47 | | P-50 |
| DIN 51524 Part 2-HLP, | | X | X | | |
| ISO 11158 HM | | X | X | X | |
| DIN 51517 part 3 | | | | | X |
| US Steel 224 | | | | | X |
| Typical Properties | | | | | |
| Test Parameters | ASTM Method | Test Values | | | |
| Viscosity @ 40 °C, cSt | D 445 | 31.2 | 68.3 | 98.3 | 221 |
| Viscosity Index | D 2270 | 100 | 99 | 97 | 96 |
| Flash Point, °C | D 92 | 202 | 218 | 230 | 256 |
| Pour Point, °C | D 97 | -21 | -15 | -12 | -6 |
| Density @ 15°C, Kg/l | D 1298 | 0.87 | 0.881 | 0.886 | 0.894 |
| Rust Test | D 665A/B | Pass | Pass | Pass | Pass |
| Copper Corrosion | D 130 | 1b | 1b | 1b | 1b |
| Stick-Slip, Ratio | CM | 0.76 | 0.76 | - | 0.73 |
| Thermal Stability | CM | Pass | Pass | - | Pass |
| Acid Number, mg KOH/g | D 974 | 0.4 | 0.41 | 0.42 | 0.44 |
| Emulsion Test 30 minutes max | @ 54 oC | D 1401 | Pass | Pass | - |
| | @ 82 oC | | - | - | Pass |
| FZG EP Gear, pass stage | D 5182 | 12 | 12 | 12 | 12 |

February 2016

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